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June 28, 2013

Allison Krueger  
Landscape Designer  
Detroit River International Wildlife Refuge  
International Wildlife Refuge Alliance  
5437 West Jefferson Avenue  
Trenton, MI 48183

Transmitted via electronic mail: [krueger.ali@gmail.com](mailto:krueger.ali@gmail.com)

RE: IWR Drum and Soil Pile Sampling Results  
Detroit River International Wildlife Refuge  
5437 West Jefferson Avenue  
Trenton, MI 48183  
SME Project No.: 055161.15

Dear Ms. Krueger:

Soil and Materials Engineers, Inc.'s (SME) Environmental Assessment Team prepared this letter to summarize the results of our soil sampling activities at the above-referenced property (the "Property"). At your request, we mobilized to the Property on May 30, 2013 to evaluate the contents of two crushed drums and associated soil piles.

We understand the drums were discovered after a geophysical survey identified two anomalies, and those anomalies were flagged for further evaluation. You reported an exploratory test pit was excavated at each of the two anomalies, and one buried, damaged drum was found at each location. Your contractor excavated the drums and the surrounding soil into two separate soil piles (one associated with each drum excavation). We labeled the drums and associated soil piles Drum North, Soil Pile North, Drum South, and Soil Pile South.

Drum North contained soil and a black, tar-like asphaltic substance, and Drum South contained fibrous resin, plastic, and other debris in a bentonite-like matrix. We conducted visual, olfactory, and photoionization detector (PID) field screening of the drum contents and soil piles, and each exhibited odor, staining, and elevated PID readings. We collected three soil samples (N-1, N-2, and N-3) from Soil Pile North, one composite sample (Drum-N) from Drum North, three soil samples (S-1, S-2, and S-3) from Soil Pile South, and one composite sample (Drum-S) from Drum South.

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consultants in the geosciences, materials, and the environment

We also requested the analytical laboratory to create a composite sample from S-1, S-2, and S-3 (S1, S2, S3 Composite).

The six soil samples were submitted for chemical analyses of volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), the 8 RCRA metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver), and polychlorinated biphenyls (PCBs) to identify the presence of target hazardous substances in the excavated soil piles.

The two drum samples were submitted for waste characterization. The samples were tested using the toxic characteristic leachate procedure (TCLP); the leachates were analyzed for VOCs, semi-VOCs, and the 8 RCRA metals. The samples were also analyzed for total PCBs. Soil sample N-3 and the composite sample S1, S2, S3 Composite were also submitted for waste characterization using TCLP testing and analysis of lead in the leachate. The chemical analyses were performed by Fibertec Environmental Services of Holt, Michigan.

The results of chemical analyses are summarized in the attached table and laboratory reports. Based on the results of chemical analyses, the drum contents and soil piles can be classified as non-hazardous waste for disposal purposes. We recommend disposal of both the soil piles and drum contents at licensed Type II (municipal waste) disposal facility.

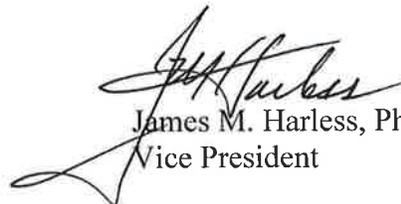
If you have any questions regarding this letter please contact us. SME appreciates the opportunity to be of continued service to you.

Sincerely,

**SOIL AND MATERIALS ENGINEERS, INC.**



Mark J. Quimby  
Senior Project Consultant



James M. Harless, PhD, CHMM  
Vice President

**Attachments:**

Table 1 – Drum Samples – Summary of Results of Chemical Analyses

Table 2 – Soil Stockpile Samples – Summary of Results of Chemical Analyses

Laboratory Reports of Chemical Analyses



**TABLE 1**  
**IWR Drum Samples - Summary of Results of Chemical Analyses**  
 SME Project No.: 055161.015  
 1 of 1

**Drum-N: Results of Chemical Analyses**

Analyte	Result (units)	Haz/Non-Haz Disposal Threshold	Comment
PCBs (total)	ND (ppm)	50 ppm*	Non-TSCA
8 RCRA Metals (TCLP)	ND (mg/L)	Varies	Non-Haz
TCE (TCLP)	0.099 mg/L	0.5 mg/L	Non-Haz
Other VOCs (TCLP)	ND (mg/L)	Varies	Non-Haz
SVOCs (TCLP)	0.14 mg/L	None	Non-Haz
Other SVOCs (TCLP)	ND (mg/L)	Varies	Non-Haz
<b>Overall Status</b>			<b>Non-Haz</b>

**Drum-S: Results of Chemical Analyses**

Analyte	Result	Haz/Non-Haz Disposal Threshold	Comment
PCBs (Total)	ND (ppm)	50 ppm*	Non-TSCA
Barium (TCLP)	1.2 mg/L	100 mg/L	Non-Haz
Lead (TCLP)	1.1 mg/L	5.0 mg/L	Non-Haz
8 RCRA Metals (TCLP)	ND (mg/L)	Varies	Non-Haz
VOCs (TCLP)	ND (mg/L)	Varies	Non-Haz
SVOCs (TCLP)	ND (mg/L)	None	Non-Haz
<b>Overall Status</b>			<b>Non-Haz</b>

**Note:**

1. Haz/Non-Haz disposal threshold is the RCRA TCLP Waste Characterization Limit to evaluate if a waste is a hazardous or non-hazardous waste.
2. \* = PCB results were compared to the TSCA 50 ppm disposal threshold.



**TABLE 2**  
**IWR Soil Stockpile Samples - Summary of Results of Chemical Analyses**  
SME Project No.: 055161.15  
2 of 2

Constituent*	Chemical Abstract Service Number	Drinking Water Protection Criteria & RBSLs	Groundwater Surface Water Interface Protection Criteria & RBSLs	Groundwater Contact Protection Criteria & RBSLs	Soil Volatilization to Indoor Air Inhalation Criteria & RBSLs	Infinite Source Volatile Soil Inhalation Criteria (VSLC) & RBSLs	Direct Contact Criteria & RBSLs	RCRA TCLP Waste Characterization Limits (20x Screening Rule)	Sample Identification	S-1	S-2	S-3	N-1	N-2	N-3
									Depth	-	-	-	-	-	-
									Collect Date	5/30/2013	5/30/2013	5/30/2013	5/30/2013	5/30/2013	5/30/2013
<b>Semivolatiles, PAHs (µg/kg)</b>															
Acenaphthene	83-32-9	3.0E+5	8,700	9.7E+5	1.9E+8	8.1E+7	4.1E+7	NA	660	400	<330	<330	<330	<330	<330
Acenaphthylene	208-96-8	5,900	ID	4.4E+5	1.6E+6	2.2E+6	1.6E+6	NA	<330	<330	<330	<330	<330	<330	<330
Anthracene	120-12-7	41,000	ID	41,000	1.0E+9 (D)	1.4E+9	2.3E+8	NA	2,300	810	<330	<330	<330	<330	330
Benzo(a)anthracene (Q)	56-55-3	NLL	NLL	NLL	NLL	NLV	NLV	20,000	4,100	1,800	<330	1,100	490	480	
Benzo(a)pyrene (Q)	50-32-8	NLL	NLL	NLL	NLV	NLV	2,000	NA	3,600	1,700	<330	950	<330	370	
Benzo(b)fluoranthene (Q)	205-99-2	NLL	NLL	NLL	ID	ID	20,000	NA	4,900	2,300	<330	1,300	400	640	
Benzo(g,h,i)perylene	191-24-2	NLL	NLL	NLL	NLV	NLV	2.5E+6	NA	2,500	1,200	<330	770	<330	340	
Benzo(k)fluoranthene (Q)	207-08-9	NLL	NLL	NLL	NLV	NLV	2.0E+5	NA	1,600	720	<330	510	<330	<330	
Chrysene (Q)	218-01-9	NLL	NLL	NLL	ID	ID	2.0E+6	NA	4,100	1,700	<330	970	<330	410	
Dibenzo(a,h)anthracene (Q)	53-70-3	NLL	NLL	NLL	NLV	NLV	2,000	NA	650	<330	<330	<330	<330	<330	
Fluoranthene	206-44-0	7.3E+5	5,500	7.3E+5	1.0E+9 (D)	7.4E+8	4.6E+7	NA	11,000	4,600	460	2,100	750	1,100	
Fluorene	86-73-7	3.9E+5	5,300	8.9E+5	5.8E+8	1.3E+8	2.7E+7	NA	940	500	<330	<330	<330	<330	
Indeno(1,2,3-cd)pyrene (Q)	193-39-5	NLL	NLL	NLL	NLV	NLV	20,000	NA	2,800	1,300	<330	840	<330	<330	
2-Methylnaphthalene	91-57-6	57,000	4,200	5.5E+6	2.7E+6	1.5E+6	8.1E+6	NA	<330	540	<330	<330	<330	5,900	
Phenanthrene	85-01-8	56,000	2,100	1.1E+6	2.8E+6	1.6E+5	1.6E+6	NA	7,900	3,800	340	980	670	1,600	
Pyrene	129-00-0	4.8E+5	ID	4.8E+5	1.0E+9 (D)	6.5E+8	2.9E+7	NA	8,000	3,700	360	1,600	590	1,000	
<b>Semivolatiles (µg/kg)</b>															
1,2,4-Trichlorobenzene	120-82-1	4,200	5,900 (X)	1.1E+6 (C)	1.1E+6 (C)	2.8E+7	9.9E+5 (DD)	NA	<330	<330	<330	<330	<330	<330	<330
<b>PCBs (µg/kg)</b>															
PCB, Aroclor 1016	12674-11-2							50,000^	<330	<330	<380	<330	<380	<380	<330
PCB, Aroclor 1221	11104-28-2							50,000^	<330	<330	<380	<330	<380	<380	<330
PCB, Aroclor 1232	11141-16-5							50,000^	<330	<330	<380	<330	<380	<380	<330
PCB, Aroclor 1242	53469-21-9							50,000^	<330	<330	<380	<330	<380	<380	<330
PCB, Aroclor 1248	12672-29-6							50,000^	<330	<330	<380	<330	<380	<380	<330
PCB, Aroclor 1254	11097-69-1	NLL	NLL	NLL	3.00E+06	2.40E+05	4,000	50,000^	<330	710	1,100	<330	1,000	340	
PCB, Aroclor 1260	11096-82-5							50,000^	<330	<330	<380	<330	<380	<380	<330
PCB, Aroclor 1262	37324-23-5							50,000^	<330	<330	<380	<330	<380	<380	<330
PCB, Aroclor 1268	11100-14-4							50,000^	<330	<330	<380	<330	<380	<380	<330
<b>Metals (µg/kg)</b>															
Arsenic	7440-38-2	4,600	4,600	2.0E+6	NLV	NLV	7,600	100,000	4,800	4,700	2,700	6,400	3,300	5,200	
Barium (B)	7440-39-3	1.3E+6	(G)	1.0E+9 (D)	NLV	NLV	3.7E+7	2,000,000	65,000	190,000	130,000	34,000	90,000	710,000	
Cadmium (B)	7440-43-9	6,000	(G,X)	2.3E+8	NLV	NLV	5.5E+5	20,000	480	1,200	600	110	670	14,000	
Chromium, Total	7440-47-3	30,000	3,300	1.4E+8	NLV	NLV	2.5E+6	100,000	32,000	34,000	14,000	12,000	12,000	49,000	
Lead (B)	7439-92-1	7.0E+5	(G,X)	ID	NLV	NLV	4.0E+5	100,000^^	120,000	150,000	120,000	9,400	66,000	2,800,000	
Mercury, Total	7439-97-6	1,700	50 (M); 1.2	47,000	48,000	52,000	1.6E+5	4,000	<50	130	240	<50	76	590	
Selenium (B)	7782-49-2	4,000	400	7.8E+7	NLV	NLV	2.6E+6	20,000	550	500	260	320	510	3,000	
Silver (B)	7440-22-4	4,500	100 (M); 27	2.0E+8	NLV	NLV	2.5E+6	100,000	<100	<100	<100	<100	100	8,500	
<b>TCLP Result (mg/L)</b>															
Lead (B)	7439-92-1							5.0^^		<1.0		NE	NE	<1.0	
<b>COMMENT</b>										<b>NON-HAZARDOUS</b>			<b>NON-HAZARDOUS</b>		

Notes:

- Criteria taken from RRD Operational Memorandum No. 1, Table 2. Soil: Residential and Commercial I Part 201 Generic Cleanup Criteria and Screening levels, dated September 28, 2012 or RCRA TCLP Waste Characterization Limits.
- Detected results shown in BOLD. Results exceeding one or more criteria are shaded, as are the criteria.
- VOCs = Volatile Organic Compounds; SVOCs = Semi-Volatile Organic Compounds; PAHs = Polynuclear Aromatic Hydrocarbons; Other VOCs and Other PAHs = Refer to the analytical report for the full list of VOC and PAH analytes.
- (X) = GSI criterion shown is not protective of surface water used as drinking water source.
- CS - Criterion is specific to individual constituent.
- <RL - Analytical result was below laboratory reporting limit(s).
- Shaded <RL results have an elevated reporting limit that exceeds one or more criteria. Underlined results exceed TCLP Waste Characterization 20x screening value.
- ID - Insufficient data to develop criteria.
- (D) - Calculated criterion exceeds 100% concentration, and is therefore reduced to 100%, or 1,000,000,000 ppb.
- NA = Not applicable.
- NE - Not evaluated.
- NLV - Not likely to volatilize.
- \* = GSI Protection was calculated for the indicated metals using the MDEQ spreadsheet for calculating GSI. A default water hardness value of 150 mg/kg as CaCO3 was used to calculate GSI. Results are presented for surface water receiving bodies not protected as a drinking water source.
- Italicized* = the respective criterion was below the Statewide Default Background Level (SDBL) and therefore the value defaulted to the SDBL value.
- \*\* = Total xylenes was calculated as the sum of o-xylene and m,p-xylene concentrations.
- Concentrations were also compared to and found to be below Infinite Source Volatile Soil Inhalation Criteria and Soil Saturation Concentration screening levels.
- ^ = PCB results were compared to the TSCA 50 ppm disposal threshold.
- ^^ = Total lead result exceeded TCLP Waste Characterization 20x screening value, but TCLP lead result did not exceed actual TCLP Waste Characterization Limit.



Monday, June 10, 2013

Fibertec Project Number: 56149  
Project Identification: IWR Gateway /055161.15  
Submittal Date: 06/03/2013

Mr. Mark Quimby  
Soil and Materials Engineers, Inc. - Plymouth  
43980 Plymouth Oaks  
Plymouth, MI 48170

Dear Mr. Quimby,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note samples will be disposed of 30 days after reporting date.

TCLP (1311) extraction date for volatiles is June 3, 2013. TCLP (1311) extraction date for metals and semi-volatiles is June 4, 2013.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

A handwritten signature in black ink, appearing to read "Daryl Strandbergh", written in a cursive style.

Daryl P. Strandbergh  
Laboratory Director

DPS/kc

Enclosures

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**Analytical Laboratory Report**  
**Laboratory Project Number: 56149**  
**Laboratory Sample Number: 56149-001**

Order: 56149  
Page: 2 of 8  
Date: 06/10/13

Client Identification: <b>Soil and Materials Engineers, Inc. - Plymouth</b>	Sample Description: <b>DRUM-N</b>	Chain of Custody: <b>124027</b>
Client Project Name: <b>IWR Gateway</b>	Sample No: <b>1</b>	Collect Date: <b>05/30/13</b>
Client Project No: <b>055161.15</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>13:15</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 56149-001		Matrix: Soil/Solid		Analyst: MJE	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	<b>39</b>		%	0.1	1.0	06/05/13	MC130605	06/06/13	MC130605

Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)				Aliquot ID: 56149-001		Matrix: Soil/Solid		Analyst: BDA	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Aroclor-1016	U	J,G-	µg/kg	330	10	06/04/13	PS13F04D	06/06/13	SA13F06A
2. Aroclor-1221	U	J,G-	µg/kg	330	10	06/04/13	PS13F04D	06/06/13	SA13F06A
3. Aroclor-1232	U	J,G-	µg/kg	330	10	06/04/13	PS13F04D	06/06/13	SA13F06A
4. Aroclor-1242	U	J,G-	µg/kg	330	10	06/04/13	PS13F04D	06/06/13	SA13F06A
5. Aroclor-1248	U	J,G-	µg/kg	330	10	06/04/13	PS13F04D	06/06/13	SA13F06A
6. Aroclor-1254	U	J,G-	µg/kg	330	10	06/04/13	PS13F04D	06/06/13	SA13F06A
7. Aroclor-1260	U	J,G-	µg/kg	330	10	06/04/13	PS13F04D	06/06/13	SA13F06A
8. Aroclor-1262 (NN)	U	J,G-	µg/kg	330	10	06/04/13	PS13F04D	06/06/13	SA13F06A
9. Aroclor-1268 (NN)	U	J,G-	µg/kg	330	10	06/04/13	PS13F04D	06/06/13	SA13F06A

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Client Identification: <b>Soil and Materials Engineers, Inc. - Plymouth</b>	Sample Description: <b>DRUM-N</b>	Chain of Custody: <b>124027</b>
Client Project Name: <b>IWR Gateway</b>	Sample No: <b>1</b>	Collect Date: <b>05/30/13</b>
Client Project No: <b>055161.15</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>13:15</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

TCLP RCRA-8 Elements by ICP-MS (EPA 3005A-M/EPA 6020A)				Aliquot ID: 56149-001A			Matrix: TCLP Extract		Analyst: JLP
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Arsenic	U		mg/L	1.0	20	06/05/13	PT13F05A	06/05/13	T213F05A
2. Barium	U		mg/L	1.0	20	06/05/13	PT13F05A	06/05/13	T213F05A
3. Cadmium	U		mg/L	0.20	20	06/05/13	PT13F05A	06/05/13	T213F05A
4. Chromium	U		mg/L	1.0	20	06/05/13	PT13F05A	06/05/13	T213F05A
5. Lead	U		mg/L	1.0	20	06/05/13	PT13F05A	06/05/13	T213F05A
6. Selenium	U		mg/L	0.20	20	06/05/13	PT13F05A	06/05/13	T213F05A
7. Silver	U		mg/L	1.0	20	06/05/13	PT13F05A	06/05/13	T213F05A

TCLP Mercury (EPA 7470A)				Aliquot ID: 56149-001A			Matrix: TCLP Extract		Analyst: JLH
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Mercury	U		mg/L	0.050	5.0	06/06/13	PM13F06A	06/07/13	M613F07A

TCLP Volatiles (EPA 5030B/EPA 8260B)				Aliquot ID: 56149-001A			Matrix: TCLP Extract		Analyst: JPL
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Benzene	U		mg/L	0.020	20	06/04/13	VI13F04A	06/04/13	VI13F04A
2. 2-Butanone	U		mg/L	0.10	20	06/04/13	VI13F04A	06/04/13	VI13F04A
3. Carbon Tetrachloride	U		mg/L	0.020	20	06/04/13	VI13F04A	06/04/13	VI13F04A
4. Chlorobenzene	U		mg/L	0.020	20	06/04/13	VI13F04A	06/04/13	VI13F04A
5. Chloroform	U		mg/L	0.020	20	06/04/13	VI13F04A	06/04/13	VI13F04A
6. 1,4-Dichlorobenzene	U		mg/L	0.020	20	06/04/13	VI13F04A	06/04/13	VI13F04A
7. 1,2-Dichloroethane	U		mg/L	0.020	20	06/04/13	VI13F04A	06/04/13	VI13F04A
8. 1,1-Dichloroethene	U		mg/L	0.020	20	06/04/13	VI13F04A	06/04/13	VI13F04A
9. Tetrachloroethene	U		mg/L	0.020	20	06/04/13	VI13F04A	06/04/13	VI13F04A
10. Trichloroethene	0.099		mg/L	0.020	20	06/04/13	VI13F04A	06/04/13	VI13F04A
11. Vinyl Chloride	U		mg/L	0.020	20	06/04/13	VI13F04A	06/04/13	VI13F04A

TCLP Semivolatiles (EPA 3510C/EPA 8270C)				Aliquot ID: 56149-001A			Matrix: TCLP Extract		Analyst: GAN
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. 2,4-Dinitrotoluene (NN)	U		mg/L	0.053	11	06/06/13	PS13F06B	06/06/13	S613F06A
2. Hexachlorobenzene	U		mg/L	0.025	11	06/06/13	PS13F06B	06/06/13	S613F06A
3. Hexachlorobutadiene	U		mg/L	0.10	11	06/06/13	PS13F06B	06/06/13	S613F06A
4. Hexachloroethane	U		mg/L	0.10	11	06/06/13	PS13F06B	06/06/13	S613F06A
5. 2-Methylphenol (NN)	U		mg/L	0.10	11	06/06/13	PS13F06B	06/06/13	S613F06A
6. 3&4-Methylphenol (NN)	0.14		mg/L	0.10	11	06/06/13	PS13F06B	06/06/13	S613F06A
7. Nitrobenzene	U		mg/L	0.10	11	06/06/13	PS13F06B	06/06/13	S613F06A
8. Pentachlorophenol	U		mg/L	0.11	11	06/06/13	PS13F06B	06/06/13	S613F06A
9. Pyridine	U		mg/L	0.10	11	06/06/13	PS13F06B	06/06/13	S613F06A

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**Analytical Laboratory Report**  
**Laboratory Project Number: 56149**  
**Laboratory Sample Number: 56149-001**

Order: 56149  
Page: 4 of 8  
Date: 06/10/13

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Client Identification:	<b>Soil and Materials Engineers, Inc. - Plymouth</b>	Sample Description:	<b>DRUM-N</b>	Chain of Custody:	<b>124027</b>
Client Project Name:	<b>IWR Gateway</b>	Sample No:	<b>1</b>	Collect Date:	<b>05/30/13</b>
Client Project No:	<b>055161.15</b>	Sample Matrix:	<b>Soil/Solid</b>	Collect Time:	<b>13:15</b>

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Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

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TCLP Semivolatiles (EPA 3510C/EPA 8270C)				Aliquot ID: 56149-001A		Matrix: TCLP Extract		Analyst: GAN	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
10.2,4,5-Trichlorophenol	U		mg/L	0.10	11	06/06/13	PS13F06B	06/06/13	S613F06A
11.2,4,6-Trichlorophenol	U		mg/L	0.10	11	06/06/13	PS13F06B	06/06/13	S613F06A

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**Analytical Laboratory Report**  
**Laboratory Project Number: 56149**  
**Laboratory Sample Number: 56149-002**

Order: 56149  
Page: 5 of 8  
Date: 06/10/13

Client Identification: <b>Soil and Materials Engineers, Inc. - Plymouth</b>	Sample Description: <b>DRUM-S</b>	Chain of Custody: <b>124027</b>
Client Project Name: <b>IWR Gateway</b>	Sample No: <b>2</b>	Collect Date: <b>05/30/13</b>
Client Project No: <b>055161.15</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>13:20</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 56149-002		Matrix: Soil/Solid		Analyst: MJE	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	<b>1.0</b>		%	0.1	1.0	06/05/13	MC130605	06/06/13	MC130605

Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)				Aliquot ID: 56149-002		Matrix: Soil/Solid		Analyst: BDA	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Aroclor-1016	U		µg/kg	340	25	06/04/13	PS13F04D	06/06/13	SA13F06A
2. Aroclor-1221	U		µg/kg	340	25	06/04/13	PS13F04D	06/06/13	SA13F06A
3. Aroclor-1232	U		µg/kg	340	25	06/04/13	PS13F04D	06/06/13	SA13F06A
4. Aroclor-1242	U		µg/kg	340	25	06/04/13	PS13F04D	06/06/13	SA13F06A
5. Aroclor-1248	U		µg/kg	340	25	06/04/13	PS13F04D	06/06/13	SA13F06A
6. Aroclor-1254	U		µg/kg	340	25	06/04/13	PS13F04D	06/06/13	SA13F06A
7. Aroclor-1260	U		µg/kg	340	25	06/04/13	PS13F04D	06/06/13	SA13F06A
8. Aroclor-1262 (NN)	U		µg/kg	340	25	06/04/13	PS13F04D	06/06/13	SA13F06A
9. Aroclor-1268 (NN)	U		µg/kg	340	25	06/04/13	PS13F04D	06/06/13	SA13F06A

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Client Identification: <b>Soil and Materials Engineers, Inc. - Plymouth</b>	Sample Description: <b>DRUM-S</b>	Chain of Custody: <b>124027</b>
Client Project Name: <b>IWR Gateway</b>	Sample No: <b>2</b>	Collect Date: <b>05/30/13</b>
Client Project No: <b>055161.15</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>13:20</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

TCLP RCRA-8 Elements by ICP-MS (EPA 3005A-M/EPA 6020A)				Aliquot ID: 56149-002A			Matrix: TCLP Extract		Analyst: JLP
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Arsenic	U		mg/L	1.0	20	06/05/13	PT13F05A	06/05/13	T213F05A
2. Barium	1.2		mg/L	1.0	20	06/05/13	PT13F05A	06/05/13	T213F05A
3. Cadmium	U		mg/L	0.20	20	06/05/13	PT13F05A	06/05/13	T213F05A
4. Chromium	U		mg/L	1.0	20	06/05/13	PT13F05A	06/05/13	T213F05A
5. Lead	1.1		mg/L	1.0	20	06/05/13	PT13F05A	06/05/13	T213F05A
6. Selenium	U		mg/L	0.20	20	06/05/13	PT13F05A	06/05/13	T213F05A
7. Silver	U		mg/L	1.0	20	06/05/13	PT13F05A	06/05/13	T213F05A

TCLP Mercury (EPA 7470A)				Aliquot ID: 56149-002A			Matrix: TCLP Extract		Analyst: JLH
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Mercury	U		mg/L	0.050	5.0	06/06/13	PM13F06A	06/07/13	M613F07A

TCLP Volatiles (EPA 5030B/EPA 8260B)				Aliquot ID: 56149-002A			Matrix: TCLP Extract		Analyst: JPL
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Benzene	U		mg/L	0.020	20	06/04/13	VI13F04A	06/04/13	VI13F04A
2. 2-Butanone	U		mg/L	0.10	20	06/04/13	VI13F04A	06/04/13	VI13F04A
3. Carbon Tetrachloride	U		mg/L	0.020	20	06/04/13	VI13F04A	06/04/13	VI13F04A
4. Chlorobenzene	U		mg/L	0.020	20	06/04/13	VI13F04A	06/04/13	VI13F04A
5. Chloroform	U		mg/L	0.020	20	06/04/13	VI13F04A	06/04/13	VI13F04A
6. 1,4-Dichlorobenzene	U		mg/L	0.020	20	06/04/13	VI13F04A	06/04/13	VI13F04A
7. 1,2-Dichloroethane	U		mg/L	0.020	20	06/04/13	VI13F04A	06/04/13	VI13F04A
8. 1,1-Dichloroethene	U		mg/L	0.020	20	06/04/13	VI13F04A	06/04/13	VI13F04A
9. Tetrachloroethene	U		mg/L	0.020	20	06/04/13	VI13F04A	06/04/13	VI13F04A
10. Trichloroethene	U		mg/L	0.020	20	06/04/13	VI13F04A	06/04/13	VI13F04A
11. Vinyl Chloride	U		mg/L	0.020	20	06/04/13	VI13F04A	06/04/13	VI13F04A

TCLP Semivolatiles (EPA 3510C/EPA 8270C)				Aliquot ID: 56149-002A			Matrix: TCLP Extract		Analyst: GAN
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. 2,4-Dinitrotoluene (NN)	U		mg/L	0.091	18	06/06/13	PS13F06B	06/06/13	S613F06A
2. Hexachlorobenzene	U		mg/L	0.025	18	06/06/13	PS13F06B	06/06/13	S613F06A
3. Hexachlorobutadiene	U		mg/L	0.10	18	06/06/13	PS13F06B	06/06/13	S613F06A
4. Hexachloroethane	U		mg/L	0.10	18	06/06/13	PS13F06B	06/06/13	S613F06A
5. 2-Methylphenol (NN)	U		mg/L	0.10	18	06/06/13	PS13F06B	06/06/13	S613F06A
6. 3&4-Methylphenol (NN)	U		mg/L	0.10	18	06/06/13	PS13F06B	06/06/13	S613F06A
7. Nitrobenzene	U		mg/L	0.10	18	06/06/13	PS13F06B	06/06/13	S613F06A
8. Pentachlorophenol	U		mg/L	0.18	18	06/06/13	PS13F06B	06/06/13	S613F06A
9. Pyridine	U		mg/L	0.10	18	06/06/13	PS13F06B	06/06/13	S613F06A

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**Analytical Laboratory Report**  
**Laboratory Project Number: 56149**  
**Laboratory Sample Number: 56149-002**

Order: 56149  
Page: 7 of 8  
Date: 06/10/13

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Client Identification:	<b>Soil and Materials Engineers, Inc. - Plymouth</b>	Sample Description:	<b>DRUM-S</b>	Chain of Custody:	<b>124027</b>
Client Project Name:	<b>IWR Gateway</b>	Sample No:	<b>2</b>	Collect Date:	<b>05/30/13</b>
Client Project No:	<b>055161.15</b>	Sample Matrix:	<b>Soil/Solid</b>	Collect Time:	<b>13:20</b>

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Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

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TCLP Semivolatiles (EPA 3510C/EPA 8270C)				Aliquot ID: 56149-002A		Matrix: TCLP Extract		Analyst: GAN	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
10.2,4,5-Trichlorophenol	U		mg/L	0.10	18	06/06/13	PS13F06B	06/06/13	S613F06A
11.2,4,6-Trichlorophenol	U		mg/L	0.10	18	06/06/13	PS13F06B	06/06/13	S613F06A

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**Definitions/ Qualifiers:**

- A:** Spike recovery or precision unusable due to dilution.
- B:** The analyte was detected in the associated method blank.
- E:** The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
- J:** The concentration is an estimated value.
- M:** Modified Method
- U:** The analyte was not detected at or above the reporting limit.
- X:** Matrix Interference has resulted in a raised reporting limit or distorted result.
- W:** Results reported on a wet-weight basis.
- \*:** Value reported is outside QA limits

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**Exception Summary:**

- G-** : Recovery of the associated Surrogate Compound exceeds the lower control limit. Results may be biased low.





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**Industrial Hygiene Services, Inc.**  
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 email: asbestos@fibertec.us

**Geoprobe**  
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 Brighton, MI 48116  
 Phone: 810 220 3300  
 Fax: 810 220 3311

Chain of Custody #  
**124027**  
 PAGE 1 of 1

*emailed 6/3/13*

Client Name: **SME**

Contact Person: **Mark Rineby / Dawn Metesky**

Project Name/ Number: **055161.15**

**IWR Gateway**

Matrix Code	Turnaround	Matrix Code
S Soil	24 hour RUSH (surcharge applied)	GW Ground Water
W Water	48 hour RUSH (surcharge applied)	SW Surface Water
A Air	72 hour RUSH (surcharge applied)	WW Waste Water
O Oil	Standard/57 bus down	Other: Specify
P Wipe	Other: Specify	

Purchase Order#	Date	Time	Client Sample #	Client Sample Description	MATRIX (SEE RIGHT CORNER FOR CODE)	# OF CONTAINERS	PRESERVED (Y/N)
	5/30/13	1320		DRAIN - N			
				DRAIN - S			

TCLP VOCs  
 TCLP SVOCs  
 TCLP 8RCRA  
 PCBs

**5-Day turnaround**

Comments:

Relinquished By: **Dawn Metesky** Date/Time: **5/30/13** Received By: **SME Cold Storage**

Relinquished By: **SME Cold Storage (PPL)** Date/Time: **12/16/13** Received By: **SME Cold Storage**

Relinquished By: **SME Cold Storage (PPL)** Date/Time: **1/15/14** Received By: **SME Cold Storage**

LAB USE ONLY:  
 Fibertec project number:  
 Laboratory Tracking:  
 Temperature of Receipt:

TERMS & CONDITIONS ON BACK

**501149**





Monday, June 10, 2013

Fibertec Project Number: 56150  
Project Identification: IWR Gateway /055161.15  
Submittal Date: 06/03/2013

Mr. Mark Quimby  
Soil and Materials Engineers, Inc. - Plymouth  
43980 Plymouth Oaks  
Plymouth, MI 48170

Dear Mr. Quimby,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note samples will be disposed of 30 days after reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

A handwritten signature in black ink, appearing to read "Daryl Strandbergh", written in a cursive style.

Daryl P. Strandbergh  
Laboratory Director

DPS/kc

Enclosures

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**Analytical Laboratory Report**  
**Laboratory Project Number: 56150**  
**Laboratory Sample Number: 56150-001**

Order: 56150  
Page: 2 of 20  
Date: 06/10/13

Client Identification: <b>Soil and Materials Engineers, Inc. - Plymouth</b>	Sample Description: <b>S-1</b>	Chain of Custody: <b>124026</b>
Client Project Name: <b>IWR Gateway</b>	Sample No: <b>1</b>	Collect Date: <b>05/30/13</b>
Client Project No: <b>055161.15</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>13:30</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 56150-001A		Matrix: Soil/Solid		Analyst: BMG	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	<b>14</b>		%	0.1	1.0	06/04/13	MC130604	06/05/13	MC130604

RCRA Elements by ICP/MS (EPA 0200.2-M/EPA 6020A)				Aliquot ID: 56150-001A		Matrix: Soil/Solid		Analyst: JLP	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Arsenic	<b>4800</b>		µg/kg	100	20	06/05/13	PT13F05C	06/05/13	T213F05A
2. Barium	<b>65000</b>		µg/kg	1000	20	06/05/13	PT13F05C	06/05/13	T213F05A
3. Cadmium	<b>480</b>		µg/kg	50	20	06/05/13	PT13F05C	06/05/13	T213F05A
4. Chromium	<b>32000</b>		µg/kg	500	20	06/05/13	PT13F05C	06/05/13	T213F05A
5. Lead	<b>120000</b>		µg/kg	1000	20	06/05/13	PT13F05C	06/05/13	T213F05A
6. Selenium	<b>550</b>		µg/kg	200	20	06/05/13	PT13F05C	06/06/13	T213F06A
7. Silver	U		µg/kg	100	20	06/05/13	PT13F05C	06/05/13	T213F05A

Mercury by CVAAS (EPA 7471B)				Aliquot ID: 56150-001A		Matrix: Soil/Solid		Analyst: JLH	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Mercury	U		µg/kg	50	9.3	06/04/13	PM13F04C	06/04/13	M613F04A

Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)				Aliquot ID: 56150-001A		Matrix: Soil/Solid		Analyst: BDA	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Aroclor-1016	U		µg/kg	330	5.0	06/04/13	PS13F04D	06/05/13	SA13F05A
2. Aroclor-1221	U		µg/kg	330	5.0	06/04/13	PS13F04D	06/05/13	SA13F05A
3. Aroclor-1232	U		µg/kg	330	5.0	06/04/13	PS13F04D	06/05/13	SA13F05A
4. Aroclor-1242	U		µg/kg	330	5.0	06/04/13	PS13F04D	06/05/13	SA13F05A
5. Aroclor-1248	U		µg/kg	330	5.0	06/04/13	PS13F04D	06/05/13	SA13F05A
6. Aroclor-1254	U		µg/kg	330	5.0	06/04/13	PS13F04D	06/05/13	SA13F05A
7. Aroclor-1260	U		µg/kg	330	5.0	06/04/13	PS13F04D	06/05/13	SA13F05A
8. Aroclor-1262 (NN)	U		µg/kg	330	5.0	06/04/13	PS13F04D	06/05/13	SA13F05A
9. Aroclor-1268 (NN)	U		µg/kg	330	5.0	06/04/13	PS13F04D	06/05/13	SA13F05A

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B)				Aliquot ID: 56150-001		Matrix: Soil/Solid		Analyst: CCD	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Acetone	U		µg/kg	1000	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
2. Acrylonitrile	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
3. Benzene	U		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
4. Bromobenzene	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
5. Bromochloromethane	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
6. Bromodichloromethane	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A

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Client Identification: <b>Soil and Materials Engineers, Inc. - Plymouth</b>	Sample Description: <b>S-1</b>	Chain of Custody: <b>124026</b>
Client Project Name: <b>IWR Gateway</b>	Sample No: <b>1</b>	Collect Date: <b>05/30/13</b>
Client Project No: <b>055161.15</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>13:30</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B)				Aliquot ID: 56150-001	Matrix: Soil/Solid	Analyst: CCD			
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
7. Bromoform	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
8. Bromomethane	U		µg/kg	290	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
9. 2-Butanone	U		µg/kg	750	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
10. n-Butylbenzene	U		µg/kg	58	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
11. sec-Butylbenzene	U		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
12. tert-Butylbenzene	U		µg/kg	58	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
13. Carbon Disulfide	U		µg/kg	250	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
14. Carbon Tetrachloride	U		µg/kg	58	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
15. Chlorobenzene	U		µg/kg	120	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
16. Chloroethane	U		µg/kg	250	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
17. Chloroform	U		µg/kg	58	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
18. Chloromethane	U		µg/kg	250	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
19. 2-Chlorotoluene	U		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
20. Dibromochloromethane	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
21. 1,2-Dibromo-3-chloropropane (SIM) (N)	U		µg/kg	29	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
22. Dibromomethane	U		µg/kg	250	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
26. Dichlorodifluoromethane	U		µg/kg	250	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
27. 1,1-Dichloroethane	U		µg/kg	58	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
28. 1,2-Dichloroethane	U		µg/kg	58	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
30. cis-1,2-Dichloroethene	U		µg/kg	58	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
32. 1,2-Dichloropropane	U		µg/kg	58	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
33. cis-1,3-Dichloropropene	U		µg/kg	58	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
34. trans-1,3-Dichloropropene	U		µg/kg	58	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
35. Ethylbenzene	U		µg/kg	58	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
36. Ethylene Dibromide	U		µg/kg	58	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
37. 2-Hexanone	U		µg/kg	2500	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
38. Isopropylbenzene	U		µg/kg	290	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
39. Methyl Iodide	U		µg/kg	290	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
40. Methylene Chloride	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
41. 4-Methyl-2-pentanone	U		µg/kg	2500	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
42. MTBE	U		µg/kg	250	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
43. Naphthalene	U		µg/kg	330	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
44. n-Propylbenzene	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
45. Styrene	U		µg/kg	58	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A

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Client Identification: <b>Soil and Materials Engineers, Inc. - Plymouth</b>	Sample Description: <b>S-1</b>	Chain of Custody: <b>124026</b>
Client Project Name: <b>IWR Gateway</b>	Sample No: <b>1</b>	Collect Date: <b>05/30/13</b>
Client Project No: <b>055161.15</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>13:30</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B)				Aliquot ID: 56150-001		Matrix: Soil/Solid		Analyst: CCD	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	58	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
48. Tetrachloroethene	U		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
49. Toluene	U		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
50. 1,2,4-Trichlorobenzene	U		µg/kg	330	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
51. 1,1,1-Trichloroethane	U		µg/kg	120	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
52. 1,1,2-Trichloroethane	U		µg/kg	58	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
53. Trichloroethene	U		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
54. Trichlorofluoromethane	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
55. 1,2,3-Trichloropropane	U		µg/kg	120	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
56. 1,2,3-Trimethylbenzene (NN)	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
57. 1,2,4-Trimethylbenzene	U		µg/kg	120	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
59. Vinyl Chloride	U		µg/kg	58	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
60. Xylenes	U		µg/kg	150	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A

Polynuclear Aromatic Hydrocarbons (PNAs) (EPA 3546/EPA 8270C)				Aliquot ID: 56150-001A		Matrix: Soil/Solid		Analyst: BDA	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Acenaphthene (SIM)	660		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F04B
2. Acenaphthylene (SIM)	U		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F04B
3. Anthracene (SIM)	2300		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F04B
4. Benzo(a)anthracene (SIM)	4100		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F04B
5. Benzo(a)pyrene (SIM)	3600		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F04B
6. Benzo(b)fluoranthene (SIM)	4900		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F04B
7. Benzo(ghi)perylene (SIM)	2500		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F04B
8. Benzo(k)fluoranthene (SIM)	1600		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F04B
9. Chrysene (SIM)	4100		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F04B
10. Dibenzo(a,h)anthracene (SIM)	650		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F04B
11. Fluoranthene (SIM)	11000		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F04B
12. Fluorene (SIM)	940		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F04B
13. Indeno(1,2,3-cd)pyrene (SIM)	2800		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F04B
14. 2-Methylnaphthalene (SIM)	U		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F04B
15. Phenanthrene (SIM)	7900		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F04B
16. Pyrene (SIM)	8000		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F04B

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**Analytical Laboratory Report**  
**Laboratory Project Number: 56150**  
**Laboratory Sample Number: 56150-002**

Order: 56150  
Page: 5 of 20  
Date: 06/10/13

Client Identification: <b>Soil and Materials Engineers, Inc. - Plymouth</b>	Sample Description: <b>S-2</b>	Chain of Custody: <b>124026</b>
Client Project Name: <b>IWR Gateway</b>	Sample No: <b>2</b>	Collect Date: <b>05/30/13</b>
Client Project No: <b>055161.15</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>13:40</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 56150-002A		Matrix: Soil/Solid		Analyst: BMG	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	<b>14</b>		%	0.1	1.0	06/04/13	MC130604	06/05/13	MC130604

RCRA Elements by ICP/MS (EPA 0200.2-M/EPA 6020A)				Aliquot ID: 56150-002A		Matrix: Soil/Solid		Analyst: JLP	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Arsenic	<b>4700</b>		µg/kg	100	20	06/05/13	PT13F05C	06/05/13	T213F05A
2. Barium	<b>190000</b>		µg/kg	1000	20	06/05/13	PT13F05C	06/05/13	T213F05A
3. Cadmium	<b>1200</b>		µg/kg	50	20	06/05/13	PT13F05C	06/05/13	T213F05A
4. Chromium	<b>34000</b>		µg/kg	500	20	06/05/13	PT13F05C	06/05/13	T213F05A
5. Lead	<b>150000</b>		µg/kg	1000	20	06/05/13	PT13F05C	06/05/13	T213F05A
6. Selenium	<b>500</b>		µg/kg	200	20	06/05/13	PT13F05C	06/06/13	T213F06A
7. Silver	U		µg/kg	100	20	06/05/13	PT13F05C	06/05/13	T213F05A

Mercury by CVAAS (EPA 7471B)				Aliquot ID: 56150-002A		Matrix: Soil/Solid		Analyst: JLH	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Mercury	<b>130</b>		µg/kg	50	9.4	06/04/13	PM13F04C	06/04/13	M613F04A

Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)				Aliquot ID: 56150-002A		Matrix: Soil/Solid		Analyst: BDA	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Aroclor-1016	U		µg/kg	330	5.0	06/04/13	PS13F04D	06/10/13	SA13F10A
2. Aroclor-1221	U		µg/kg	330	5.0	06/04/13	PS13F04D	06/10/13	SA13F10A
3. Aroclor-1232	U		µg/kg	330	5.0	06/04/13	PS13F04D	06/10/13	SA13F10A
4. Aroclor-1242	U		µg/kg	330	5.0	06/04/13	PS13F04D	06/10/13	SA13F10A
5. Aroclor-1248	U		µg/kg	330	5.0	06/04/13	PS13F04D	06/10/13	SA13F10A
6. Aroclor-1254	<b>710</b>		µg/kg	330	5.0	06/04/13	PS13F04D	06/10/13	SA13F10A
7. Aroclor-1260	U		µg/kg	330	5.0	06/04/13	PS13F04D	06/10/13	SA13F10A
8. Aroclor-1262 (NN)	U		µg/kg	330	5.0	06/04/13	PS13F04D	06/10/13	SA13F10A
9. Aroclor-1268 (NN)	U		µg/kg	330	5.0	06/04/13	PS13F04D	06/10/13	SA13F10A

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B)				Aliquot ID: 56150-002		Matrix: Soil/Solid		Analyst: CCD	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Acetone	U		µg/kg	1000	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
2. Acrylonitrile	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
3. Benzene	U		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
4. Bromobenzene	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
5. Bromochloromethane	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
6. Bromodichloromethane	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A

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**Analytical Laboratory Report**  
**Laboratory Project Number: 56150**  
**Laboratory Sample Number: 56150-002**

Order: 56150  
Page: 6 of 20  
Date: 06/10/13

Client Identification: <b>Soil and Materials Engineers, Inc. - Plymouth</b>	Sample Description: <b>S-2</b>	Chain of Custody: <b>124026</b>
Client Project Name: <b>IWR Gateway</b>	Sample No: <b>2</b>	Collect Date: <b>05/30/13</b>
Client Project No: <b>055161.15</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>13:40</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B)				Aliquot ID: 56150-002		Matrix: Soil/Solid		Analyst: CCD	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
7. Bromoform	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
8. Bromomethane	U		µg/kg	290	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
9. 2-Butanone	U		µg/kg	750	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
10. n-Butylbenzene	U		µg/kg	58	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
11. sec-Butylbenzene	U		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
12. tert-Butylbenzene	U		µg/kg	58	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
13. Carbon Disulfide	U		µg/kg	250	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
14. Carbon Tetrachloride	U		µg/kg	58	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
15. Chlorobenzene	U		µg/kg	120	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
16. Chloroethane	U		µg/kg	250	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
17. Chloroform	U		µg/kg	58	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
18. Chloromethane	U		µg/kg	250	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
19. 2-Chlorotoluene	U		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
20. Dibromochloromethane	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
21. 1,2-Dibromo-3-chloropropane (SIM) (N)	U		µg/kg	29	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
22. Dibromomethane	U		µg/kg	250	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
26. Dichlorodifluoromethane	U		µg/kg	250	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
27. 1,1-Dichloroethane	U		µg/kg	58	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
28. 1,2-Dichloroethane	U		µg/kg	58	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
30. cis-1,2-Dichloroethene	U		µg/kg	58	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
32. 1,2-Dichloropropane	U		µg/kg	58	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
33. cis-1,3-Dichloropropene	U		µg/kg	58	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
34. trans-1,3-Dichloropropene	U		µg/kg	58	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
35. Ethylbenzene	U		µg/kg	58	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
36. Ethylene Dibromide	U		µg/kg	58	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
37. 2-Hexanone	U		µg/kg	2500	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
38. Isopropylbenzene	U		µg/kg	290	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
39. Methyl Iodide	U		µg/kg	290	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
40. Methylene Chloride	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
41. 4-Methyl-2-pentanone	U		µg/kg	2500	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
42. MTBE	U		µg/kg	250	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
43. Naphthalene	U		µg/kg	330	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
44. n-Propylbenzene	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
45. Styrene	U		µg/kg	58	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A

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Analytical Laboratory Report  
Laboratory Project Number: 56150  
Laboratory Sample Number: 56150-002

Order: 56150  
Page: 7 of 20  
Date: 06/10/13

Client Identification:	<b>Soil and Materials Engineers, Inc. - Plymouth</b>	Sample Description:	<b>S-2</b>	Chain of Custody:	<b>124026</b>
Client Project Name:	<b>IWR Gateway</b>	Sample No:	<b>2</b>	Collect Date:	<b>05/30/13</b>
Client Project No:	<b>055161.15</b>	Sample Matrix:	<b>Soil/Solid</b>	Collect Time:	<b>13:40</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B)				Aliquot ID: 56150-002		Matrix: Soil/Solid		Analyst: CCD	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	58	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
48. Tetrachloroethene	U		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
49. Toluene	U		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
50. 1,2,4-Trichlorobenzene	U		µg/kg	330	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
51. 1,1,1-Trichloroethane	U		µg/kg	120	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
52. 1,1,2-Trichloroethane	U		µg/kg	58	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
53. Trichloroethene	U		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
54. Trichlorofluoromethane	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
55. 1,2,3-Trichloropropane	U		µg/kg	120	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
56. 1,2,3-Trimethylbenzene (NN)	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
57. 1,2,4-Trimethylbenzene	U		µg/kg	120	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
59. Vinyl Chloride	U		µg/kg	58	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
60. Xylenes	U		µg/kg	150	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A

Polynuclear Aromatic Hydrocarbons (PNAs) (EPA 3546/EPA 8270C)				Aliquot ID: 56150-002A		Matrix: Soil/Solid		Analyst: BDA	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Acenaphthene (SIM)	400		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F04B
2. Acenaphthylene (SIM)	U		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F04B
3. Anthracene (SIM)	810		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F04B
4. Benzo(a)anthracene (SIM)	1800		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F04B
5. Benzo(a)pyrene (SIM)	1700		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F04B
6. Benzo(b)fluoranthene (SIM)	2300		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F04B
7. Benzo(ghi)perylene (SIM)	1200		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F04B
8. Benzo(k)fluoranthene (SIM)	720		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F04B
9. Chrysene (SIM)	1700		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F04B
10. Dibenzo(a,h)anthracene (SIM)	U		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F04B
11. Fluoranthene (SIM)	4600		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F04B
12. Fluorene (SIM)	500		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F04B
13. Indeno(1,2,3-cd)pyrene (SIM)	1300		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F04B
14. 2-Methylnaphthalene (SIM)	540		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F04B
15. Phenanthrene (SIM)	3800		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F04B
16. Pyrene (SIM)	3700		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F04B

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**Analytical Laboratory Report**  
**Laboratory Project Number: 56150**  
**Laboratory Sample Number: 56150-003**

Order: 56150  
Page: 8 of 20  
Date: 06/10/13

Client Identification: <b>Soil and Materials Engineers, Inc. - Plymouth</b>	Sample Description: <b>S-3</b>	Chain of Custody: <b>124026</b>
Client Project Name: <b>IWR Gateway</b>	Sample No: <b>3</b>	Collect Date: <b>05/30/13</b>
Client Project No: <b>055161.15</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>13:50</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 56150-003A		Matrix: Soil/Solid		Analyst: BMG	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	<b>12</b>		%	0.1	1.0	06/04/13	MC130604	06/05/13	MC130604

RCRA Elements by ICP/MS (EPA 0200.2-M/EPA 6020A)				Aliquot ID: 56150-003A		Matrix: Soil/Solid		Analyst: JLP	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Arsenic	<b>2700</b>		µg/kg	100	20	06/05/13	PT13F05C	06/05/13	T213F05A
2. Barium	<b>130000</b>		µg/kg	1000	20	06/05/13	PT13F05C	06/05/13	T213F05A
3. Cadmium	<b>600</b>		µg/kg	50	20	06/05/13	PT13F05C	06/05/13	T213F05A
4. Chromium	<b>14000</b>		µg/kg	500	20	06/05/13	PT13F05C	06/05/13	T213F05A
5. Lead	<b>120000</b>		µg/kg	1000	20	06/05/13	PT13F05C	06/05/13	T213F05A
6. Selenium	<b>260</b>		µg/kg	200	20	06/05/13	PT13F05C	06/06/13	T213F06A
7. Silver	U		µg/kg	100	20	06/05/13	PT13F05C	06/05/13	T213F05A

Mercury by CVAAS (EPA 7471B)				Aliquot ID: 56150-003A		Matrix: Soil/Solid		Analyst: JLH	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Mercury	<b>240</b>		µg/kg	50	9.0	06/04/13	PM13F04C	06/04/13	M613F04A

Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)				Aliquot ID: 56150-003A		Matrix: Soil/Solid		Analyst: BDA	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Aroclor-1016	U		µg/kg	380	25	06/04/13	PS13F04D	06/10/13	SA13F10A
2. Aroclor-1221	U		µg/kg	380	25	06/04/13	PS13F04D	06/10/13	SA13F10A
3. Aroclor-1232	U		µg/kg	380	25	06/04/13	PS13F04D	06/10/13	SA13F10A
4. Aroclor-1242	U		µg/kg	380	25	06/04/13	PS13F04D	06/10/13	SA13F10A
5. Aroclor-1248	U		µg/kg	380	25	06/04/13	PS13F04D	06/10/13	SA13F10A
6. Aroclor-1254	<b>1100</b>		µg/kg	380	25	06/04/13	PS13F04D	06/10/13	SA13F10A
7. Aroclor-1260	U		µg/kg	380	25	06/04/13	PS13F04D	06/10/13	SA13F10A
8. Aroclor-1262 (NN)	U		µg/kg	380	25	06/04/13	PS13F04D	06/10/13	SA13F10A
9. Aroclor-1268 (NN)	U		µg/kg	380	25	06/04/13	PS13F04D	06/10/13	SA13F10A

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B)				Aliquot ID: 56150-003		Matrix: Soil/Solid		Analyst: CCD	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Acetone	U		µg/kg	1000	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
2. Acrylonitrile	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
3. Benzene	U		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
4. Bromobenzene	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
5. Bromochloromethane	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
6. Bromodichloromethane	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A

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Analytical Laboratory Report  
Laboratory Project Number: 56150  
Laboratory Sample Number: 56150-003

Order: 56150  
Page: 9 of 20  
Date: 06/10/13

Client Identification: **Soil and Materials Engineers, Inc. - Plymouth** Sample Description: **S-3** Chain of Custody: **124026**  
Client Project Name: **IWR Gateway** Sample No: **3** Collect Date: **05/30/13**  
Client Project No: **055161.15** Sample Matrix: **Soil/Solid** Collect Time: **13:50**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B)				Aliquot ID: 56150-003		Matrix: Soil/Solid		Analyst: CCD	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
7. Bromoform	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
8. Bromomethane	U		µg/kg	280	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
9. 2-Butanone	U		µg/kg	750	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
10. n-Butylbenzene	U		µg/kg	57	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
11. sec-Butylbenzene	U		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
12. tert-Butylbenzene	U		µg/kg	57	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
13. Carbon Disulfide	U		µg/kg	250	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
14. Carbon Tetrachloride	U		µg/kg	57	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
15. Chlorobenzene	U		µg/kg	110	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
16. Chloroethane	U		µg/kg	250	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
17. Chloroform	U		µg/kg	57	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
18. Chloromethane	U		µg/kg	250	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
19. 2-Chlorotoluene	U		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
20. Dibromochloromethane	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
21. 1,2-Dibromo-3-chloropropane (SIM) (N)	U		µg/kg	28	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
22. Dibromomethane	U		µg/kg	250	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
26. Dichlorodifluoromethane	U		µg/kg	250	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
27. 1,1-Dichloroethane	U		µg/kg	57	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
28. 1,2-Dichloroethane	U		µg/kg	57	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
30. cis-1,2-Dichloroethene	U		µg/kg	57	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
32. 1,2-Dichloropropane	U		µg/kg	57	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
33. cis-1,3-Dichloropropene	U		µg/kg	57	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
34. trans-1,3-Dichloropropene	U		µg/kg	57	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
35. Ethylbenzene	U		µg/kg	57	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
36. Ethylene Dibromide	U		µg/kg	57	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
37. 2-Hexanone	U		µg/kg	2500	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
38. Isopropylbenzene	U		µg/kg	280	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
39. Methyl Iodide	U		µg/kg	280	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
40. Methylene Chloride	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
41. 4-Methyl-2-pentanone	U		µg/kg	2500	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
42. MTBE	U		µg/kg	250	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
43. Naphthalene	U		µg/kg	330	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
44. n-Propylbenzene	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
45. Styrene	U		µg/kg	57	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A

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Client Identification: <b>Soil and Materials Engineers, Inc. - Plymouth</b>	Sample Description: <b>S-3</b>	Chain of Custody: <b>124026</b>
Client Project Name: <b>IWR Gateway</b>	Sample No: <b>3</b>	Collect Date: <b>05/30/13</b>
Client Project No: <b>055161.15</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>13:50</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B)				Aliquot ID: 56150-003		Matrix: Soil/Solid		Analyst: CCD	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	57	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
48. Tetrachloroethene	U		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
49. Toluene	U		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
50. 1,2,4-Trichlorobenzene	U		µg/kg	330	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
51. 1,1,1-Trichloroethane	U		µg/kg	110	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
52. 1,1,2-Trichloroethane	U		µg/kg	57	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
53. Trichloroethene	U		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
54. Trichlorofluoromethane	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
55. 1,2,3-Trichloropropane	U		µg/kg	110	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
56. 1,2,3-Trimethylbenzene (NN)	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
57. 1,2,4-Trimethylbenzene	U		µg/kg	110	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
59. Vinyl Chloride	U		µg/kg	57	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
60. Xylenes	U		µg/kg	150	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A

Polynuclear Aromatic Hydrocarbons (PNAs) (EPA 3546/EPA 8270C)				Aliquot ID: 56150-003A		Matrix: Soil/Solid		Analyst: GAN	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Acenaphthene	U		µg/kg	330	1.0	06/04/13	PS13F04D	06/05/13	S613F04B
2. Acenaphthylene	U		µg/kg	330	1.0	06/04/13	PS13F04D	06/05/13	S613F04B
3. Anthracene	U		µg/kg	330	1.0	06/04/13	PS13F04D	06/05/13	S613F04B
4. Benzo(a)anthracene	U		µg/kg	330	1.0	06/04/13	PS13F04D	06/05/13	S613F04B
5. Benzo(a)pyrene	U		µg/kg	330	1.0	06/04/13	PS13F04D	06/05/13	S613F04B
6. Benzo(b)fluoranthene	U		µg/kg	330	1.0	06/04/13	PS13F04D	06/05/13	S613F04B
7. Benzo(ghi)perylene	U	J,N1	µg/kg	330	1.0	06/04/13	PS13F04D	06/05/13	S613F04B
8. Benzo(k)fluoranthene	U		µg/kg	330	1.0	06/04/13	PS13F04D	06/05/13	S613F04B
9. Chrysene	U		µg/kg	330	1.0	06/04/13	PS13F04D	06/05/13	S613F04B
10. Dibenzo(a,h)anthracene	U	J,N1	µg/kg	330	1.0	06/04/13	PS13F04D	06/05/13	S613F04B
11. Fluoranthene	<b>460</b>		µg/kg	330	1.0	06/04/13	PS13F04D	06/05/13	S613F04B
12. Fluorene	U		µg/kg	330	1.0	06/04/13	PS13F04D	06/05/13	S613F04B
13. Indeno(1,2,3-cd)pyrene	U	J,N1	µg/kg	330	1.0	06/04/13	PS13F04D	06/05/13	S613F04B
14. 2-Methylnaphthalene	U		µg/kg	330	1.0	06/04/13	PS13F04D	06/05/13	S613F04B
15. Phenanthrene	<b>340</b>		µg/kg	330	1.0	06/04/13	PS13F04D	06/05/13	S613F04B
16. Pyrene	<b>360</b>		µg/kg	330	1.0	06/04/13	PS13F04D	06/05/13	S613F04B

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**Analytical Laboratory Report**  
**Laboratory Project Number: 56150**  
**Laboratory Sample Number: 56150-004**

Order: 56150  
Page: 11 of 20  
Date: 06/10/13

Client Identification: <b>Soil and Materials Engineers, Inc. - Plymouth</b>	Sample Description: <b>N-1</b>	Chain of Custody: <b>124026</b>
Client Project Name: <b>IWR Gateway</b>	Sample No: <b>4</b>	Collect Date: <b>05/30/13</b>
Client Project No: <b>055161.15</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>14:00</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 56150-004A		Matrix: Soil/Solid		Analyst: MJE	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	<b>12</b>		%	0.1	1.0	06/05/13	MC130605	06/06/13	MC130605

RCRA Elements by ICP/MS (EPA 0200.2-M/EPA 6020A)				Aliquot ID: 56150-004A		Matrix: Soil/Solid		Analyst: JLP	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Arsenic	<b>6400</b>		µg/kg	100	20	06/05/13	PT13F05C	06/05/13	T213F05A
2. Barium	<b>34000</b>		µg/kg	1000	20	06/05/13	PT13F05C	06/05/13	T213F05A
3. Cadmium	<b>110</b>		µg/kg	50	20	06/05/13	PT13F05C	06/05/13	T213F05A
4. Chromium	<b>12000</b>		µg/kg	500	40	06/05/13	PT13F05C	06/06/13	T213F06A
5. Lead	<b>9400</b>		µg/kg	1000	20	06/05/13	PT13F05C	06/05/13	T213F05A
6. Selenium	<b>320</b>		µg/kg	200	20	06/05/13	PT13F05C	06/06/13	T213F06A
7. Silver	U		µg/kg	100	20	06/05/13	PT13F05C	06/05/13	T213F05A

Mercury by CVAAS (EPA 7471B)				Aliquot ID: 56150-004A		Matrix: Soil/Solid		Analyst: JLH	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Mercury	U		µg/kg	50	8.4	06/04/13	PM13F04C	06/04/13	M613F04A

Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)				Aliquot ID: 56150-004A		Matrix: Soil/Solid		Analyst: BDA	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Aroclor-1016	U		µg/kg	330	5.0	06/04/13	PS13F04D	06/06/13	SA13F06A
2. Aroclor-1221	U		µg/kg	330	5.0	06/04/13	PS13F04D	06/06/13	SA13F06A
3. Aroclor-1232	U		µg/kg	330	5.0	06/04/13	PS13F04D	06/06/13	SA13F06A
4. Aroclor-1242	U		µg/kg	330	5.0	06/04/13	PS13F04D	06/06/13	SA13F06A
5. Aroclor-1248	U		µg/kg	330	5.0	06/04/13	PS13F04D	06/06/13	SA13F06A
6. Aroclor-1254	U		µg/kg	330	5.0	06/04/13	PS13F04D	06/06/13	SA13F06A
7. Aroclor-1260	U		µg/kg	330	5.0	06/04/13	PS13F04D	06/06/13	SA13F06A
8. Aroclor-1262 (NN)	U		µg/kg	330	5.0	06/04/13	PS13F04D	06/06/13	SA13F06A
9. Aroclor-1268 (NN)	U		µg/kg	330	5.0	06/04/13	PS13F04D	06/06/13	SA13F06A

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B)				Aliquot ID: 56150-004		Matrix: Soil/Solid		Analyst: CCD	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Acetone	U		µg/kg	1000	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
2. Acrylonitrile	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
3. Benzene	U		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
4. Bromobenzene	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
5. Bromochloromethane	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
6. Bromodichloromethane	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A

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**Analytical Laboratory Report**  
**Laboratory Project Number: 56150**  
**Laboratory Sample Number: 56150-004**

Order: 56150  
Page: 12 of 20  
Date: 06/10/13

Client Identification: <b>Soil and Materials Engineers, Inc. - Plymouth</b>	Sample Description: <b>N-1</b>	Chain of Custody: <b>124026</b>
Client Project Name: <b>IWR Gateway</b>	Sample No: <b>4</b>	Collect Date: <b>05/30/13</b>
Client Project No: <b>055161.15</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>14:00</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B)				Aliquot ID: 56150-004		Matrix: Soil/Solid		Analyst: CCD	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
7. Bromoform	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
8. Bromomethane	U		µg/kg	290	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
9. 2-Butanone	U		µg/kg	750	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
10. n-Butylbenzene	U		µg/kg	57	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
11. sec-Butylbenzene	U		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
12. tert-Butylbenzene	U		µg/kg	57	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
13. Carbon Disulfide	U		µg/kg	250	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
14. Carbon Tetrachloride	U		µg/kg	57	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
15. Chlorobenzene	U		µg/kg	110	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
16. Chloroethane	U		µg/kg	250	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
17. Chloroform	U		µg/kg	57	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
18. Chloromethane	U		µg/kg	250	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
19. 2-Chlorotoluene	U		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
20. Dibromochloromethane	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
21. 1,2-Dibromo-3-chloropropane (SIM) (N)	U		µg/kg	29	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
22. Dibromomethane	U		µg/kg	250	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
26. Dichlorodifluoromethane	U		µg/kg	250	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
27. 1,1-Dichloroethane	U		µg/kg	57	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
28. 1,2-Dichloroethane	U		µg/kg	57	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
30. cis-1,2-Dichloroethene	U		µg/kg	57	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
32. 1,2-Dichloropropane	U		µg/kg	57	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
33. cis-1,3-Dichloropropene	U		µg/kg	57	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
34. trans-1,3-Dichloropropene	U		µg/kg	57	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
35. Ethylbenzene	U		µg/kg	57	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
36. Ethylene Dibromide	U		µg/kg	57	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
37. 2-Hexanone	U		µg/kg	2500	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
38. Isopropylbenzene	U		µg/kg	290	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
39. Methyl Iodide	U		µg/kg	290	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
40. Methylene Chloride	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
41. 4-Methyl-2-pentanone	U		µg/kg	2500	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
42. MTBE	U		µg/kg	250	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
43. Naphthalene	U		µg/kg	330	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
44. n-Propylbenzene	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
45. Styrene	U		µg/kg	57	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A

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Client Identification: <b>Soil and Materials Engineers, Inc. - Plymouth</b>	Sample Description: <b>N-1</b>	Chain of Custody: <b>124026</b>
Client Project Name: <b>IWR Gateway</b>	Sample No: <b>4</b>	Collect Date: <b>05/30/13</b>
Client Project No: <b>055161.15</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>14:00</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B)				Aliquot ID: 56150-004		Matrix: Soil/Solid		Analyst: CCD	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	57	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
48. Tetrachloroethene	U		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
49. Toluene	U		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
50. 1,2,4-Trichlorobenzene	U		µg/kg	330	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
51. 1,1,1-Trichloroethane	U		µg/kg	110	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
52. 1,1,2-Trichloroethane	U		µg/kg	57	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
53. Trichloroethene	U		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
54. Trichlorofluoromethane	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
55. 1,2,3-Trichloropropane	U		µg/kg	110	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
56. 1,2,3-Trimethylbenzene (NN)	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
57. 1,2,4-Trimethylbenzene	U		µg/kg	110	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
59. Vinyl Chloride	U		µg/kg	57	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
60. Xylenes	U		µg/kg	150	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A

Polynuclear Aromatic Hydrocarbons (PNAs) (EPA 3546/EPA 8270C)				Aliquot ID: 56150-004A		Matrix: Soil/Solid		Analyst: BDA	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Acenaphthene (SIM)	U		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B
2. Acenaphthylene (SIM)	U		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B
3. Anthracene (SIM)	U		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B
4. Benzo(a)anthracene (SIM)	1100		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B
5. Benzo(a)pyrene (SIM)	950		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B
6. Benzo(b)fluoranthene (SIM)	1300		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B
7. Benzo(ghi)perylene (SIM)	770		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B
8. Benzo(k)fluoranthene (SIM)	510		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B
9. Chrysene (SIM)	970		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B
10. Dibenzo(a,h)anthracene (SIM)	U		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B
11. Fluoranthene (SIM)	2100		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B
12. Fluorene (SIM)	U		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B
13. Indeno(1,2,3-cd)pyrene (SIM)	840		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B
14. 2-Methylnaphthalene (SIM)	U		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B
15. Phenanthrene (SIM)	980		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B
16. Pyrene (SIM)	1600		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B

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**Analytical Laboratory Report**  
**Laboratory Project Number: 56150**  
**Laboratory Sample Number: 56150-005**

Order: 56150  
Page: 14 of 20  
Date: 06/10/13

Client Identification: <b>Soil and Materials Engineers, Inc. - Plymouth</b>	Sample Description: <b>N-2</b>	Chain of Custody: <b>124026</b>
Client Project Name: <b>IWR Gateway</b>	Sample No: <b>5</b>	Collect Date: <b>05/30/13</b>
Client Project No: <b>055161.15</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>14:10</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 56150-005A		Matrix: Soil/Solid		Analyst: BMG	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	<b>11</b>		%	0.1	1.0	06/04/13	MC130604	06/05/13	MC130604

RCRA Elements by ICP/MS (EPA 0200.2-M/EPA 6020A)				Aliquot ID: 56150-005A		Matrix: Soil/Solid		Analyst: JLP	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Arsenic	<b>3300</b>		µg/kg	100	20	06/05/13	PT13F05C	06/05/13	T213F05A
2. Barium	<b>90000</b>		µg/kg	1000	20	06/05/13	PT13F05C	06/05/13	T213F05A
3. Cadmium	<b>670</b>		µg/kg	50	20	06/05/13	PT13F05C	06/05/13	T213F05A
4. Chromium	<b>12000</b>		µg/kg	500	20	06/05/13	PT13F05C	06/05/13	T213F05A
5. Lead	<b>66000</b>		µg/kg	1000	20	06/05/13	PT13F05C	06/05/13	T213F05A
6. Selenium	<b>510</b>		µg/kg	200	20	06/05/13	PT13F05C	06/06/13	T213F06A
7. Silver	<b>100</b>		µg/kg	100	20	06/05/13	PT13F05C	06/05/13	T213F05A

Mercury by CVAAS (EPA 7471B)				Aliquot ID: 56150-005A		Matrix: Soil/Solid		Analyst: JLH	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Mercury	<b>76</b>		µg/kg	50	9.4	06/04/13	PM13F04C	06/04/13	M613F04A

Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)				Aliquot ID: 56150-005A		Matrix: Soil/Solid		Analyst: BDA	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Aroclor-1016	U		µg/kg	380	25	06/04/13	PS13F04D	06/10/13	SA13F10A
2. Aroclor-1221	U		µg/kg	380	25	06/04/13	PS13F04D	06/10/13	SA13F10A
3. Aroclor-1232	U		µg/kg	380	25	06/04/13	PS13F04D	06/10/13	SA13F10A
4. Aroclor-1242	U		µg/kg	380	25	06/04/13	PS13F04D	06/10/13	SA13F10A
5. Aroclor-1248	U		µg/kg	380	25	06/04/13	PS13F04D	06/10/13	SA13F10A
6. Aroclor-1254	<b>1000</b>		µg/kg	380	25	06/04/13	PS13F04D	06/10/13	SA13F10A
7. Aroclor-1260	U		µg/kg	380	25	06/04/13	PS13F04D	06/10/13	SA13F10A
8. Aroclor-1262 (NN)	U		µg/kg	380	25	06/04/13	PS13F04D	06/10/13	SA13F10A
9. Aroclor-1268 (NN)	U		µg/kg	380	25	06/04/13	PS13F04D	06/10/13	SA13F10A

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B)				Aliquot ID: 56150-005		Matrix: Soil/Solid		Analyst: CCD	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Acetone	U		µg/kg	1000	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
2. Acrylonitrile	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
3. Benzene	U		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
4. Bromobenzene	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
5. Bromochloromethane	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
6. Bromodichloromethane	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A

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Analytical Laboratory Report  
Laboratory Project Number: 56150  
Laboratory Sample Number: 56150-005

Order: 56150  
Page: 15 of 20  
Date: 06/10/13

Client Identification: **Soil and Materials Engineers, Inc. - Plymouth** Sample Description: **N-2** Chain of Custody: **124026**  
Client Project Name: **IWR Gateway** Sample No: **5** Collect Date: **05/30/13**  
Client Project No: **055161.15** Sample Matrix: **Soil/Solid** Collect Time: **14:10**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B)				Aliquot ID: 56150-005		Matrix: Soil/Solid		Analyst: CCD	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
7. Bromoform	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
8. Bromomethane	U		µg/kg	280	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
9. 2-Butanone	U		µg/kg	750	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
10. n-Butylbenzene	U		µg/kg	56	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
11. sec-Butylbenzene	U		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
12. tert-Butylbenzene	U		µg/kg	56	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
13. Carbon Disulfide	U		µg/kg	250	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
14. Carbon Tetrachloride	U		µg/kg	56	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
15. Chlorobenzene	U		µg/kg	110	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
16. Chloroethane	U		µg/kg	250	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
17. Chloroform	U		µg/kg	56	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
18. Chloromethane	U		µg/kg	250	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
19. 2-Chlorotoluene	U		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
20. Dibromochloromethane	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
21. 1,2-Dibromo-3-chloropropane (SIM) (N)	U		µg/kg	28	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
22. Dibromomethane	U		µg/kg	250	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
26. Dichlorodifluoromethane	U		µg/kg	250	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
27. 1,1-Dichloroethane	U		µg/kg	56	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
28. 1,2-Dichloroethane	U		µg/kg	56	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
30. cis-1,2-Dichloroethene	U		µg/kg	56	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
32. 1,2-Dichloropropane	U		µg/kg	56	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
33. cis-1,3-Dichloropropene	U		µg/kg	56	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
34. trans-1,3-Dichloropropene	U		µg/kg	56	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
35. Ethylbenzene	U		µg/kg	56	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
36. Ethylene Dibromide	U		µg/kg	56	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
37. 2-Hexanone	U		µg/kg	2500	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
38. Isopropylbenzene	U		µg/kg	280	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
39. Methyl Iodide	U		µg/kg	280	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
40. Methylene Chloride	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
41. 4-Methyl-2-pentanone	U		µg/kg	2500	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
42. MTBE	U		µg/kg	250	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
43. Naphthalene	U		µg/kg	330	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
44. n-Propylbenzene	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
45. Styrene	U		µg/kg	56	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A

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Analytical Laboratory Report  
Laboratory Project Number: 56150  
Laboratory Sample Number: 56150-005

Order: 56150  
Page: 16 of 20  
Date: 06/10/13

Client Identification: **Soil and Materials Engineers, Inc. - Plymouth** Sample Description: **N-2** Chain of Custody: **124026**  
Client Project Name: **IWR Gateway** Sample No: **5** Collect Date: **05/30/13**  
Client Project No: **055161.15** Sample Matrix: **Soil/Solid** Collect Time: **14:10**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B)				Aliquot ID: 56150-005		Matrix: Soil/Solid		Analyst: CCD	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	56	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
48. Tetrachloroethene	U		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
49. Toluene	U		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
50. 1,2,4-Trichlorobenzene	U		µg/kg	330	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
51. 1,1,1-Trichloroethane	U		µg/kg	110	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
52. 1,1,2-Trichloroethane	U		µg/kg	56	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
53. Trichloroethene	U		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
54. Trichlorofluoromethane	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
55. 1,2,3-Trichloropropane	U		µg/kg	110	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
56. 1,2,3-Trimethylbenzene (NN)	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
57. 1,2,4-Trimethylbenzene	U		µg/kg	110	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
59. Vinyl Chloride	U		µg/kg	56	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
60. Xylenes	U		µg/kg	150	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A

Polynuclear Aromatic Hydrocarbons (PNAs) (EPA 3546/EPA 8270C)				Aliquot ID: 56150-005A		Matrix: Soil/Solid		Analyst: BDA	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Acenaphthene (SIM)	U		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B
2. Acenaphthylene (SIM)	U		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B
3. Anthracene (SIM)	U		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B
4. Benzo(a)anthracene (SIM)	490		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B
5. Benzo(a)pyrene (SIM)	U		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B
6. Benzo(b)fluoranthene (SIM)	400		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B
7. Benzo(ghi)perylene (SIM)	U		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B
8. Benzo(k)fluoranthene (SIM)	U		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B
9. Chrysene (SIM)	U		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B
10. Dibenzo(a,h)anthracene (SIM)	U		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B
11. Fluoranthene (SIM)	750		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B
12. Fluorene (SIM)	U		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B
13. Indeno(1,2,3-cd)pyrene (SIM)	U		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B
14. 2-Methylnaphthalene (SIM)	U		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B
15. Phenanthrene (SIM)	670		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B
16. Pyrene (SIM)	590		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B

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**Analytical Laboratory Report**  
**Laboratory Project Number: 56150**  
**Laboratory Sample Number: 56150-006**

Order: 56150  
Page: 17 of 20  
Date: 06/10/13

Client Identification: <b>Soil and Materials Engineers, Inc. - Plymouth</b>	Sample Description: <b>N-3</b>	Chain of Custody: <b>124026</b>
Client Project Name: <b>IWR Gateway</b>	Sample No: <b>6</b>	Collect Date: <b>05/30/13</b>
Client Project No: <b>055161.15</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>14:20</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 56150-006A		Matrix: Soil/Solid		Analyst: BMG	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	<b>16</b>		%	0.1	1.0	06/04/13	MC130604	06/05/13	MC130604

RCRA Elements by ICP/MS (EPA 0200.2-M/EPA 6020A)				Aliquot ID: 56150-006A		Matrix: Soil/Solid		Analyst: JLP	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Arsenic	<b>5200</b>		µg/kg	100	20	06/06/13	PT13F06B	06/06/13	T213F06A
2. Barium	<b>710000</b>		µg/kg	20000	400	06/06/13	PT13F06B	06/06/13	T213F06A
3. Cadmium	<b>14000</b>	J,N1	µg/kg	50	20	06/06/13	PT13F06B	06/06/13	T213F06A
4. Chromium	<b>49000</b>		µg/kg	500	20	06/06/13	PT13F06B	06/06/13	T213F06A
5. Lead	<b>2800000</b>		µg/kg	2000	400	06/06/13	PT13F06B	06/06/13	T213F06A
6. Selenium	<b>3000</b>		µg/kg	200	20	06/06/13	PT13F06B	06/06/13	T213F06A
7. Silver	<b>8500</b>	J,N1	µg/kg	100	20	06/06/13	PT13F06B	06/06/13	T213F06A

Mercury by CVAAS (EPA 7471B)				Aliquot ID: 56150-006A		Matrix: Soil/Solid		Analyst: JLH	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Mercury	<b>590</b>		µg/kg	50	8.9	06/04/13	PM13F04C	06/04/13	M613F04A

Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)				Aliquot ID: 56150-006A		Matrix: Soil/Solid		Analyst: BDA	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Aroclor-1016	U		µg/kg	330	5.0	06/04/13	PS13F04D	06/06/13	SA13F06A
2. Aroclor-1221	U		µg/kg	330	5.0	06/04/13	PS13F04D	06/06/13	SA13F06A
3. Aroclor-1232	U		µg/kg	330	5.0	06/04/13	PS13F04D	06/06/13	SA13F06A
4. Aroclor-1242	U		µg/kg	330	5.0	06/04/13	PS13F04D	06/06/13	SA13F06A
5. Aroclor-1248	U		µg/kg	330	5.0	06/04/13	PS13F04D	06/06/13	SA13F06A
6. Aroclor-1254	<b>340</b>		µg/kg	330	5.0	06/04/13	PS13F04D	06/06/13	SA13F06A
7. Aroclor-1260	U		µg/kg	330	5.0	06/04/13	PS13F04D	06/06/13	SA13F06A
8. Aroclor-1262 (NN)	U		µg/kg	330	5.0	06/04/13	PS13F04D	06/06/13	SA13F06A
9. Aroclor-1268 (NN)	U		µg/kg	330	5.0	06/04/13	PS13F04D	06/06/13	SA13F06A

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B)				Aliquot ID: 56150-006		Matrix: Soil/Solid		Analyst: CCD	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Acetone	U		µg/kg	1000	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
2. Acrylonitrile	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
3. Benzene	<b>74</b>		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
4. Bromobenzene	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
5. Bromochloromethane	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
6. Bromodichloromethane	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A

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**Analytical Laboratory Report**  
**Laboratory Project Number: 56150**  
**Laboratory Sample Number: 56150-006**

Order: 56150  
Page: 18 of 20  
Date: 06/10/13

Client Identification: <b>Soil and Materials Engineers, Inc. - Plymouth</b>	Sample Description: <b>N-3</b>	Chain of Custody: <b>124026</b>
Client Project Name: <b>IWR Gateway</b>	Sample No: <b>6</b>	Collect Date: <b>05/30/13</b>
Client Project No: <b>055161.15</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>14:20</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B)				Aliquot ID: 56150-006		Matrix: Soil/Solid		Analyst: CCD	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
7. Bromoform	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
8. Bromomethane	U		µg/kg	300	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
9. 2-Butanone	U		µg/kg	750	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
10. n-Butylbenzene	370		µg/kg	60	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
11. sec-Butylbenzene	140		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
12. tert-Butylbenzene	U		µg/kg	60	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
13. Carbon Disulfide	U		µg/kg	250	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
14. Carbon Tetrachloride	U		µg/kg	60	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
15. Chlorobenzene	U		µg/kg	120	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
16. Chloroethane	U		µg/kg	250	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
17. Chloroform	U		µg/kg	60	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
18. Chloromethane	U		µg/kg	250	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
19. 2-Chlorotoluene	U		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
20. Dibromochloromethane	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
21. 1,2-Dibromo-3-chloropropane (SIM) (N)	U		µg/kg	30	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
22. Dibromomethane	U		µg/kg	250	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
26. Dichlorodifluoromethane	U		µg/kg	250	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
27. 1,1-Dichloroethane	U		µg/kg	60	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
28. 1,2-Dichloroethane	U		µg/kg	60	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
30. cis-1,2-Dichloroethene	U		µg/kg	60	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
32. 1,2-Dichloropropane	U		µg/kg	60	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
33. cis-1,3-Dichloropropene	U		µg/kg	60	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
34. trans-1,3-Dichloropropene	U		µg/kg	60	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
35. Ethylbenzene	520		µg/kg	60	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
36. Ethylene Dibromide	U		µg/kg	60	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
37. 2-Hexanone	U		µg/kg	2500	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
38. Isopropylbenzene	740		µg/kg	300	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
39. Methyl Iodide	U		µg/kg	300	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
40. Methylene Chloride	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
41. 4-Methyl-2-pentanone	U		µg/kg	2500	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
42. MTBE	U		µg/kg	250	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
43. Naphthalene	4000		µg/kg	330	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
44. n-Propylbenzene	770		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
45. Styrene	U		µg/kg	60	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A

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F: (231) 775-8584

Client Identification: <b>Soil and Materials Engineers, Inc. - Plymouth</b>	Sample Description: <b>N-3</b>	Chain of Custody: <b>124026</b>
Client Project Name: <b>IWR Gateway</b>	Sample No: <b>6</b>	Collect Date: <b>05/30/13</b>
Client Project No: <b>055161.15</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>14:20</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B)				Aliquot ID: 56150-006		Matrix: Soil/Solid		Analyst: CCD	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	60	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
48. Tetrachloroethene	U		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
49. Toluene	<b>280</b>		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
50. 1,2,4-Trichlorobenzene	U		µg/kg	330	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
51. 1,1,1-Trichloroethane	U		µg/kg	120	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
52. 1,1,2-Trichloroethane	U		µg/kg	60	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
53. Trichloroethene	U		µg/kg	50	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
54. Trichlorofluoromethane	U		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
55. 1,2,3-Trichloropropane	U		µg/kg	120	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
56. 1,2,3-Trimethylbenzene (NN)	<b>320</b>		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
57. 1,2,4-Trimethylbenzene	<b>1600</b>		µg/kg	120	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
58. 1,3,5-Trimethylbenzene	<b>430</b>		µg/kg	100	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
59. Vinyl Chloride	U		µg/kg	60	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A
60. Xylenes	<b>1800</b>		µg/kg	150	1.0	06/07/13	VJ13F07A	06/07/13	VJ13F07A

Polynuclear Aromatic Hydrocarbons (PNAs) (EPA 3546/EPA 8270C)				Aliquot ID: 56150-006A		Matrix: Soil/Solid		Analyst: BDA	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Acenaphthene (SIM)	U		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B
2. Acenaphthylene (SIM)	U		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B
3. Anthracene (SIM)	<b>330</b>		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B
4. Benzo(a)anthracene (SIM)	<b>480</b>		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B
5. Benzo(a)pyrene (SIM)	<b>370</b>		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B
6. Benzo(b)fluoranthene (SIM)	<b>640</b>		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B
7. Benzo(ghi)perylene (SIM)	<b>340</b>		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B
8. Benzo(k)fluoranthene (SIM)	U		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B
9. Chrysene (SIM)	<b>410</b>		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B
10. Dibenzo(a,h)anthracene (SIM)	U		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B
11. Fluoranthene (SIM)	<b>1100</b>		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B
12. Fluorene (SIM)	U		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B
13. Indeno(1,2,3-cd)pyrene (SIM)	U		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B
14. 2-Methylnaphthalene (SIM)	<b>5900</b>		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B
15. Phenanthrene (SIM)	<b>1600</b>		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B
16. Pyrene (SIM)	<b>1000</b>		µg/kg	330	20	06/04/13	PS13F04D	06/05/13	S513F05B

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**Definitions/ Qualifiers:**

- A:** Spike recovery or precision unusable due to dilution.
- B:** The analyte was detected in the associated method blank.
- E:** The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
- J:** The concentration is an estimated value.
- M:** Modified Method
- U:** The analyte was not detected at or above the reporting limit.
- X:** Matrix Interference has resulted in a raised reporting limit or distorted result.
- W:** Results reported on a wet-weight basis.
- \*:** Value reported is outside QA limits

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**Exception Summary:**

- N1** : Spiked sample recovery not within control limits.



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Analytical Laboratory  
1914 Holloway Drive  
Holt, MI 48942  
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email: lab@fibertec.us

Industrial Hygiene Services, Inc.  
1914 Holloway Drive  
Holt, MI 48942  
Phone: 517 699 0345  
Fax: 517 699 0382  
email: asbestos@fibertec.us

Geoprobe  
11766 E. Grand River  
Brighton, MI 48116  
Phone: 810 220 3300  
Fax: 810 220 3311

Client Name:

SME  
Mark Quimby/Darin  
Meleskey

Contact Person:

Mark Quimby/Darin  
Meleskey

Project Name/ Number:

066220.00

Purchase Order#

Lab Sample #	Date	Time	Client Sample #	Client Sample Descriptor
5/30/13	830		S1	
	1340		S-2	
	1350		S-3	
	1400		N-1	
	1410		N-2	
	1420		N-3	

Comments:

Relinquished By:

Darin Meleskey

Relinquished By:

SME cold storage (MRC)

Date/Time  
5/30/13 830

Received By:  
SME cold storage

Date/Time  
5/31/13 155

Received by Laboratory  
Darin Meleskey

LAB USE ONLY:

Fibertec project number:

Laboratory Tracking Temperature at Receipt:

RECEIVED ON  
ICE 2

TERMS & CONDITIONS ON BACK

54/50

**Fibertec**  
Environmental  
Services

Analytical Laboratory  
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email: lab@fibertec.us

Industrial Hygiene Services, Inc.  
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Phone: 517 699 0345  
Fax: 517 699 0382  
email: osh@fibertec.us

Geoprobe  
11766 E. Grand River  
Brighton, MI 48116  
Phone: 810 220 3900  
Fax: 810 220 3311

Chain of Custody #  
**124026**  
PAGE 1 of 1

*emailed 6/6/12*

Client Name: *SHE*

Contact Person: *Mark Quimby/Dave*

Project Name/ Number: *055161.15*

*IWR Gateway*

Purchase Order #

Lab Sample #	Date	Time	Client Sample #	Client Sample Descriptor
<i>5/30/12</i>	<i>830</i>		<i>51</i>	
	<i>1340</i>		<i>52</i>	
	<i>1350</i>		<i>53</i>	
	<i>1400</i>		<i>N1</i>	
	<i>1410</i>		<i>N2</i>	
	<i>1420</i>		<i>N3</i>	

Comments:

Relinquished By: *Dave Maglabony*

Relinquished By: *Chris*

Relinquished By: *Chris*

LAB USE ONLY:  
Fibertec project number:  
Laboratory Tracking:  
Temperature of Receipt:

MATRIX (SEE RIGHT CORNER FOR CODE)	# OF CONTAINERS	PRESERVED (Y/N)	PARAMETERS
			VOCs
			PAHs
			8 RCRA
			PCBs

Turnaround

24 hour RUSH (surcharge applies)  
 48 hour RUSH (surcharge applies)  
 72 hour RUSH (surcharge applies)  
 Standard (57 bus. days)  
 Other: Specify *5-day turnaround*

Matrix Code

Soil  Ground Water  
 W. Water  Surface Water  
 Air  W. Waste Water  
 Oil  Other: Specify *Wipe*

Date/Time: *5/24/12 1610*

Received By: *SHE Cold Storage*

Date/Time: *5/24/12 1610*

Received By: *Chris*

TERMS & CONDITIONS ON BACK

COC Revision: April, 2006

*56150*



Monday, June 17, 2013

Fibertec Project Number: 56150 Supplemental  
Project Identification: IWR Gateway /055161.15  
Submittal Date: 06/03/2013

Mr. Mark Quimby  
Soil and Materials Engineers, Inc. - Plymouth  
43980 Plymouth Oaks  
Plymouth, MI 48170

Dear Mr. Quimby,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note samples will be disposed of 30 days after reporting date.

TCLP (1311) extraction date is June 13, 2013.

Samples S-1, S-2 and S-3 were composited into one sample and analyzed per discussion.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

A handwritten signature in black ink, appearing to read "Daryl Strandbergh", written in a cursive style.

Daryl P. Strandbergh  
Laboratory Director

DPS/kc

Enclosures

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**Analytical Laboratory Report**  
**Laboratory Project Number: 56150**  
**Laboratory Sample Number: 56150-006**

Order: 56150  
Page: 2 of 4  
Date: 06/17/13

---

Client Identification: <b>Soil and Materials Engineers, Inc. - Plymouth</b>	Sample Description: <b>N-3</b>	Chain of Custody: <b>124026</b>
Client Project Name: <b>IWR Gateway</b>	Sample No: <b>6</b>	Collect Date: <b>05/30/13</b>
Client Project No: <b>055161.15</b>	Sample Matrix: <b>TCLP Extract</b>	Collect Time: <b>14:20</b>

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Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

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TCLP Metals by ICP/MS (EPA 3005A-M/EPA 6020A)				Aliquot ID: 56150-006AA		Matrix: TCLP Extract		Analyst: JLP	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Lead	U		mg/L	1.0	20	06/13/13	PT13F13L	06/13/13	T213F13A

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**Analytical Laboratory Report**  
**Laboratory Project Number: 56150**  
**Laboratory Sample Number: 56150-007**

Order: 56150  
Page: 3 of 4  
Date: 06/17/13

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Client Identification:	<b>Soil and Materials Engineers, Inc. - Plymouth</b>	Sample Description:	<b>S1, S2, S3 Composite</b>	Chain of Custody:	<b>124026</b>
Client Project Name:	<b>IWR Gateway</b>	Sample No:	<b>7</b>	Collect Date:	<b>06/03/13</b>
Client Project No:	<b>055161.15</b>	Sample Matrix:	<b>TCLP Extract</b>	Collect Time:	<b>NA</b>

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Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

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<b>TCLP Metals by ICP/MS (EPA 3005A-M/EPA 6020A)</b>				<b>Aliquot ID: 56150-007A</b>		<b>Matrix: TCLP Extract</b>		<b>Analyst: JLP</b>	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Lead	U		mg/L	1.0	20	06/13/13	PT13F13L	06/13/13	T213F13A

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**Exception Summary:**

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